## **ABSTRACT**

A method and device are presented for carrying out all-optical switching by directing an input beam towards at least one selected output channel. The input beam interacts with a polarizing beam splitting surface, and is therefore split into two beam 5 components of different polarizations. The two input beam components passes through a controllable polarization rotating medium capable of affecting the polarizations of the beam components, when in an operative mode of the medium, and allowing the beam components propagation with unchanged polarizations, when in an inoperative mode of the medium. The beam components passed through said 10 medium are directed towards said polarizing beam splitting surface to thereby produce at least one output beam propagating towards the at least one selected output channel.